Checking Mountain Soil Moisture Under the Snow, an important factor in snowmelt runoff.

Federal-State Cooperative Snow Surveys and Water Supply Forecasts for NEVADA

SOIL CONSERVATION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
AND
NEVADA STATE ENGINEER

Data included in this report were obtained by the agencies named above in cooperation with the Federal, State and local organizations listed on the last page of this report.

AS OF
FEB. 1, 1956

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

TO RECIPIENTS OF COOPERATIVE SNOW SURVEY
AND WATER SUPPLY FORECAST REPORTS:

Snow surveys in the West are conducted each year at more than 1200 snow courses. Basin and Province or State snow survey reports summarizing the results of the measurements and forecasts of seasonal runoff and water supply are issued by the Soil Conservation Service, U. S. Department of Agriculture and some of its co-operators; the Water Rights Branch of the British Columbia Department of Lands and Forests; and the California Division of Water Resources.

Copies of the various federal-state cooperative snow survey reports listed below may be secured by writing to:

Head, Water Supply Forecasting Section
Soil Conservation Service
209 S. W. 5th Avenue
Portland 4, Oregon

BASIN REPORTS:

Colorado, Rio Grande, and Platte-Arkansas River Basins	Issued monthly February through May by SCS and Colorado Experiment Station, Fort Collins, Colorado.*
Columbia River Basin	Issued monthly January through May by Soil Conservation Service, Boise, Idaho.*
Upper Missouri River Basin	Issued monthly February through May by SCS and Montana Agricultural Experiment Station, Bozeman, Montana.*
West-Wide Water Supply Outlook	Issued April 1 by Soil Conservation Service and Cooperators, Portland, Oregon.

STATE REPORTS:

Arizona	Issued semi-monthly January 15 through April 1 by SCS and Salt River Valley Water Users Association, Phoenix, Arizona.*
Nevada	Issued monthly February through April by SCS and Nevada State Engineer, Reno, Nevada.*
Oregon	Issued monthly January through May by SCS, Portland, Oregon, and Oregon Agricultural Experiment Station.*
Utah	Issued monthly January through May by SCS, Salt Lake City, Utah, and State Engineer of Utah and Utah Agricultural Experiment Station.*
Washington	Issued monthly February through May by SCS, Spokane, Washington, and State Department of Conservation and Development.*
Wyoming	Issued monthly February through May by SCS, Casper, Wyoming, and State Engineer of Wyoming.*

*Special reports are issued as needed.

The British Columbia reports are issued February 1 through June 1 and may be secured from Comptroller, Water Rights Branch, Department of Lands and Forests, Parliament Buildings, Victoria, B.C.

The California reports are issued monthly February 1 through May 1 and may be secured from Division of Water Resources, California Department of Public Works, Sacramento, California.

The annual water supply forecasts of the Weather Bureau are available in monthly bulletins published from January through May. These bulletins entitled, "Water Supply Forecasts for the Western United States" may be obtained from River Forecast Center, Weather Bureau, 712 Federal Office Building, Kansas City 6, Missouri.

FEDERAL - STATE COOPERATIVE

SNOW SURVEYS AND WATER SUPPLY FORECASTS

for

N E V A D A

Report Prepared
by

Norman S. Hall, Hydraulic Engineer

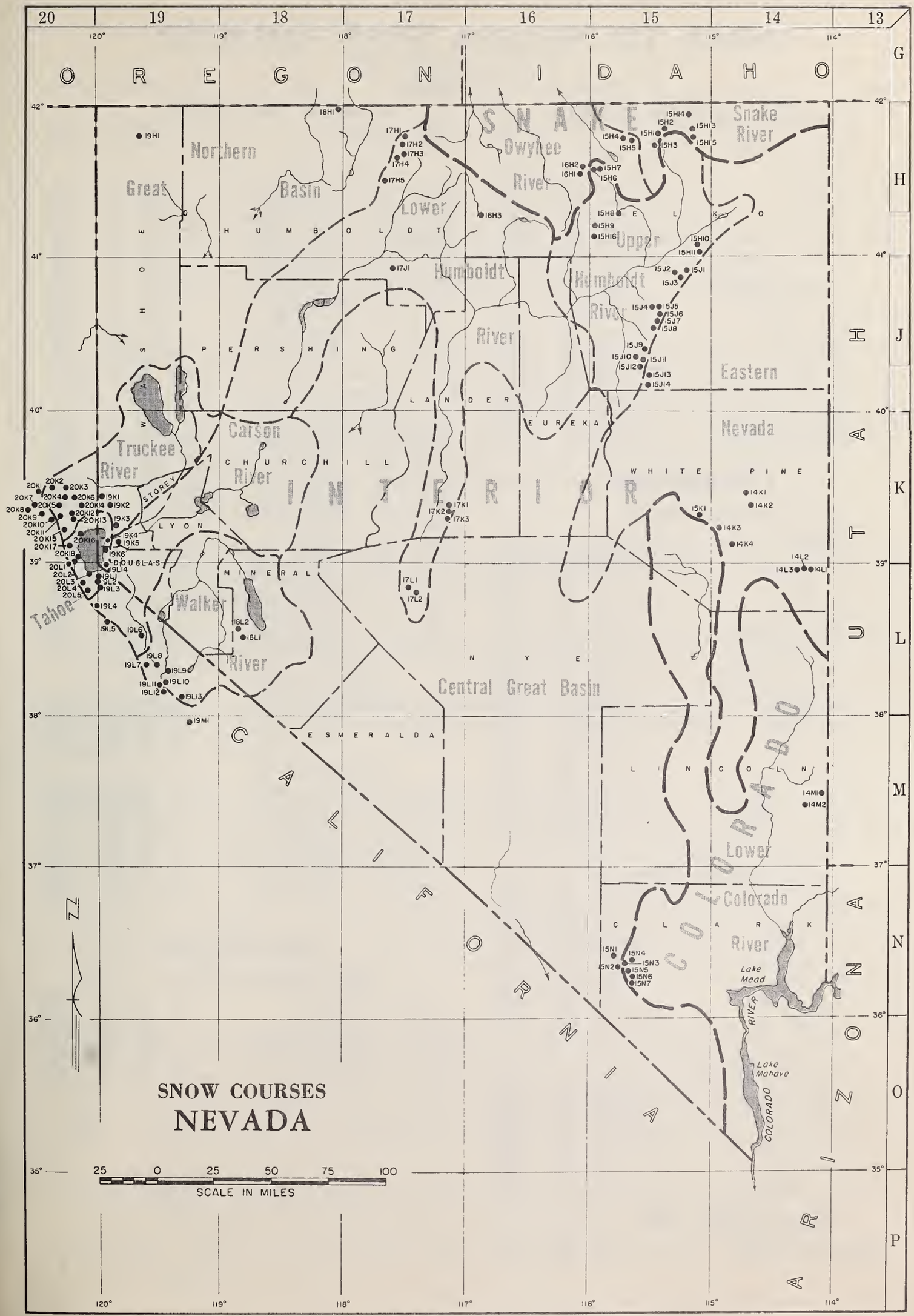
Soil Conservation Service
1485 Wells Avenue
Reno, Nevada

Issued by

George Hardman
State Conservationist
Soil Conservation Service

Hugh A. Shamberger
Nevada State Engineer

February 9, 1956



SNOW COURSES
NEVADA

INDEX TO NEVADA SNOW COURSES

Number	Name	Sec.	Twp.	Rge.	Elev.
SNAKE RIVER BASIN					
SNAKE RIVER					
15H 1	Bear Creek	31	46N	58E	7800
15H 2	Fox Creek	33	46N	58E	6800
15H 3	76 Creek	6	44N	58E	7100
15H 5*	Gold Creek	31	45N	56E	6600
15H 4*	Big Bend	30	45N	56E	6700
15H13	Goat Creek	31	46N	60E	8800
15H14	Pole Creek Ranger Station	13	46N	59E	8330
15H15	Hummingbird Springs	6	45N	60E	8945
OWYHEE RIVER					
17H 2*	Lower Buckskin	25	45N	39E	6700
17H 1*	Upper Buckskin	11	45N	39E	7200
17H 3*	Martin Creek	18	44N	40E	6700
17H 4*	Granite Peak	22	44N	39E	7800
15H 5	Gold Creek	31	45N	56E	6600
15H 4	Big Bend	30	45N	56E	6700
15H 7*	Fry Canyon	31	43N	54E	6700
15H 6*	Rodeo Flat	36	43N	53E	6800
16H 1	Lower Jack Creek	18	42N	53E	6800
16H 2	Upper Jack Creek	9	42N	53E	7250
15H 8*	Tremewan Ranch	9	39N	55E	5700
15H 9*	Taylor Canyon	35	39N	53E	6200
INTERIOR					
UPPER HUMBOLDT RIVER					
15H 1*	Bear Creek	31	46N	58E	7800
15H 2*	Fox Creek	33	46N	58E	6800
15H 3*	76 Creek	6	44N	58E	7100
15H 5*	Gold Creek	31	45N	56E	6600
15H 4*	Big Bend	30	45N	56E	6700
15H 7	Fry Canyon	31	43N	54E	6700
15H 6	Rodeo Flat	36	43N	53E	6800
16H 1*	Lower Jack Creek	18	42N	53E	6800
16H 2*	Upper Jack Creek	9	42N	53E	7250
15H 8	Tremewan Ranch	9	39N	55E	5700
15H 9	Taylor Canyon	35	39N	53E	6200
15H10	Lower Trout Creek	28	37N	61E	6900
15H11	Upper Trout Creek	4	36N	61E	8500
15J 1	Dorsey Basin	28	35N	60E	8100
15J 2	Ryan Ranch	1	34N	59E	5800
15J 3	Dry Creek	5	34N	60E	6500
15J 4	Lamoille #1	15	32N	58E	7100
15J 5	Lamoille #2	14	32N	58E	7300
15J 6	Lamoille #3	24	32N	58E	7700
15J 7	Lamoille #4	19	32N	59E	8000
15J 8	Lamoille #5	31	32N	59E	8700
15J 9	Green Mountain	23	29N	57E	8000
15J10	Harrison Pass #1	9	28N	57E	6600
15J11	Harrison Pass #2	16	28N	57E	7400
15J12	Corral Canyon	27	28N	57E	8500
15H16	Susie Creek	3	36N	54E	6175
LOWER HUMBOLDT RIVER					
17H 2	Lower Buckskin	25	45N	39E	6700
17H 1	Upper Buckskin	11	45N	39E	7200
17H 3	Martin Creek	18	44N	40E	6700
17H 4	Granite Peak	22	44N	39E	7800
17H 5	Lamance Creek	13	42N	38E	6000
16H 3	Midas	18	39N	46E	7200
17K 1	Big Creek Camp Ground	10	17N	43E	6600
17K 2	Big Creek Mine	23	17N	43E	7600
17K 3	Upper Big Creek	26	17N	43E	8000
17L 1	Lower Corral	12	11N	40E	7500
17L 2	Upper Corral	20	11N	41E	8500
17J 1	Golconda	22	35N	39E	6000
EASTERN NEVADA					
15J13	Cave Creek	25	27N	57E	7500
15J14	Hager Canyon	34	27N	57E	8000
14K 3	Murray Summit	25	16N	62E	7250
14L 1	Baker #1	29	13N	69E	7950
14L 2	Baker #2	30	13N	69E	8950
14L 3	Baker #3	25	13N	68E	9250
14K 2	Berry Creek	26	17N	65E	9100
14K 1	Bird Creek	34	19N	65E	7500
15K 1	Robinson Summit	34	18N	61E	7600
14K 4	Waro Mountain	25	15N	62E	7875
CENTRAL GREAT BASIN					
15N 2	Clark Canyon	8	19S	56E	9000
15N 1	Trough Springs	23	18S	55E	8500
NORTHERN GREAT BASIN					
19H 1	Bald Mountain	17	45N	21E	6720
18H 1	Disaster Peak	8	47N	34E	6500
LAKE TAHOE					
20L 4	(Cal.) Lake Lucille	28	12N	17E	8400
20L 1	(Cal.) Rubicon #1	6	13N	17E	8100
19L 3	(Cal.) Hagans Meadow	36	12N	18E	8000
19L 2	(Cal.) Freel Bench	36	12N	18E	7300
20K17	(Cal.) Ward Creek	21	15N	16E	7000
19L 1	(Cal.) Upper Truckee	21	12N	18E	6400
20K16	(Cal.) Tahoe City	6	15N	17E	6250
20L 2	(Cal.) Rubicon #2	6	13N	17E	7500
20K18	(Cal.) Rubicon#3	32	14N	17E	6700
20L 3	(Cal.) Richardsons #2	6	12N	18E	6500
20L 5	(Cal.) Echo Summit	6	11N	18E	7500
19K 4	Marlette Lake	13	15N	18E	8000
19L14	Daggetts Pass	19	13N	19E	7350
19K 6	Glenbrook #2	13	14N	18E	6900
19K 2*	Mt. Rose	7	17N	19E	9000
TRUCKEE RIVER					
20K 5	(Cal.) Independence Lake	9	18N	15E	8450
20K 1*	(Cal.) Webber Peak	30	19N	14E	8000
20K10*	(Cal.) Donner Summit	25	17N	14E	6900
20K17*	(Cal.) Ward Creek	21	15N	16E	7000
20K 2	(Cal.) Webber Lake	20	19N	14E	7000
20K 6	(Cal.) Sage Hen Creek	7	18N	16E	6500
20K16*	(Cal.) Tahoe City	6	15N	17E	6250
20K13	(Cal.) Truckee #2	22	17N	16E	6400
20K 3	(Cal.) Indepenoence Creek	14	19N	15E	6500
20K14	(Cal.) Boca #2	28	18N	17E	5900
20K 8*	(Cal.) Furnace Flat	10	17N	13E	6600
20K 7*	(Cal.) Fordyce Lake	34	18N	13E	6500
20K 9*	(Cal.) Soda Springs	23	17N	14E	6750
20K 4	(Cal.) Independence Camp	34	19N	15E	7000
19K 2	Mt. Rose	7	17N	19E	9000
20K12	(Cal.) Truckee Ranger Sta.	10	17N	16E	6000
20K11	(Cal.) Donner Lake	14	17N	15E	5950
19K 1	Big Meadows	15	18N	18E	8800
19K 3	Little Valley	17	16N	19E	6300
20K15	(Cal.) Squaw Valley	6	15N	16E	7500
CARSON RIVER					
19L 4	(Cal.) Carson Pass	22	10N	18E	8600
19L 6	(Cal.) Poison Flat	25	8N	21E	7900
19L 5	(Cal.) Blue Lakes	30	9N	19E	8000
19K 5	Clear Creek	16	14N	19E	7300
WALKER RIVER					
19L12	(Cal.) Center Mountain	4	3N	23E	9400
19L 7	(Cal.) Sonora Pass	1	5N	21E	8800
19L11	(Cal.) Buckeye Forks	20	4N	23E	8500
19L13	(Cal.) Virgina Lakes	5	2N	25E	9500
19L 9	(Cal.) Willow Flat	21	5N	23E	8250
19L10	(Cal.) Buckeye Roughs	15	4N	23E	7900
19L 8	(Cal.) Leavitt Meadows	4	5N	22E	7200
19M 1*	(Cal.) Tioga Pass	30	1N	25E	9900
18L 1	Lapon Meadow	36	8N	28E	9000
18L 2	Mt. Grant	23	8N	28E	9000
COLORADO					
LOWER COLORADO RIVER					
15N 6	Rainbow Canyon	31	19S	57E	7800
15N 5	Kyle Canyon	26	19S	56E	8200
15N 4	Lee Canyon #1	10	19S	56E	8300
15N 3	Lee Canyon #2	9	19S	56E	9000
15N 7	Rainbow Canyon #2	6	20S	57E	8100
14M 1	Mathew Canyon	11	5S	70E	6000
14M 2	Pine Canyon	11	6S	69E	6200

* Located on adjacent watershed

WATER SUPPLY OUTLOOK FOR NEVADA

February 1, 1956

* *
* Snow stored water in the watersheds of Nevada ranges from *
* above normal in the western portion in the Sierras, to *
* normal in the Humboldt and adjacent watersheds of north- *
* eastern Nevada, to poor in the southern part of the State. *
* *

Key snow courses measured on the eastern slope of the Sierra Nevada Mountains indicate above normal snowpack. As of February 1, the Truckee River watershed is 135 percent of the 1938-52 15-year February 1 average. Lake Tahoe low elevation snow water measured 110 percent of the February 1 15-year average while the high elevation snow is about 190 percent of the February 1 15-year average. Moving south along the eastern slope of the Sierra Mountains, the Carson and Walker River watershed measured about 200 percent as of this date.

In northeastern Nevada, the Owyhee, Snake and Humboldt River surveys indicated snow water content to be 100 percent of the 15-year average (1938-52) or 230 percent above last year.

Reports from southern Nevada indicate meager snow cover in the Central Great Basin and Lower Colorado River drainages.

Soil Moisture: Soils in mountain watersheds, extremely dry at the beginning of the winter season, are now satisfactorily primed or saturated for the coming spring runoff.

Reservoir Water: Stored water in seven major reservoirs in Nevada is now 19 percent greater than last year and 108 percent greater than the 15-year average (1938-52). However, in northern Nevada the stored water picture is not too good. Wild Horse Reservoir on the Owyhee is only 27 percent of the 15-year average or 9 percent of capacity while Rye Patch on the Humboldt River holds in storage only 12 percent of the 15-year average or 6 percent of capacity. The stored water situation on the western part of the State is much better than last year at this time. Five major reservoirs contain 121 percent of the 15-year average or 71 percent of capacity.

Streamflow: During the month of January, excessive streamflow continued in western and northern Nevada. High water was recorded on the Humboldt, Quinn and Owyhee Rivers ending a long period of deficient runoff. U. S. Geological Survey reports the runoff of the West Walker River near Coleville, California was 438 percent of normal for January and the Humboldt River at Palisade, Nevada flowed 544 percent of the January normal.

Precipitation: State-wide precipitation this fall (September through November 1955) was deficient in all drainage areas. Heavy December and January precipitation has materially improved the dry soils throughout the state. The only below normal area is the Lower Colorado River drainage in the southern portion.

STATUS OF RESERVOIR STORAGE

FEBRUARY 1, 1956

BASIN AND STREAM	RESERVOIR	USABLE CAPACITY (1000 AF)	USABLE STORAGE - 1000 ACRE FEET			
			1956	1955	1954	15-YR. AVE. 1938-52
Owyhee	Wild Horse	33	3	2	16	11
Lower Humboldt	Rye Patch	179	10	7	85	82
Colorado	Mohave	1,810	1,645	1,654	1,686	New reservoir*
Colorado	Mead	27,217	11,231	12,305	16,511	19,082
Tahoe	Tahoe	732	524	393	533	412
Truckee	Boca	41	17	3	5	12
Carson	Lahontan	286	209	138	212	188
West Walker	Topaz	59	37	16	36	35
East Walker	Bridgeport	42	34	14	32	30

*Storage began in 1950. The 1950-55 average is 1,349,000

NEVADA SNOW SURVEYS FEBRUARY 1, 1956

DRAINAGE BASIN and SNOW COURSE	No.	Elev.	SNOW COVER MEASUREMENTS 1956 Date of Survey	Snow Depth (In.)	Water Content (In.)	Past Record Water Content (In.) 1955	1954	1938-52 Avg.	Prior Yrs. Record
SNAKE RIVER									
Bear Creek	15H1	7800	2/1	55	18.0	9.2	-	-	1
*Big Bend	15H4	6700	2/1	36	11.2	3.4	5.2	10.4	8
Fox Creek	15H2	6800	2/1	24	6.3	4.3	-	-	1
Goat Creek	15H13	8800	1/31	59	19.2	5.6	-	-	1
*Gold Creek	15H5	6600	2/1	22	6.7	2.3	3.2	6.0	7
Hummingbird Springs	15H15	8945	1/31	68	20.8	8.1	-	-	1
Pole Creek Ranger Station	15H14	8330	1/31	52	15.3	6.4	-	-	1
76 Creek	15H3	7100	2/2	45	13.2	5.2	-	-	1
OWYHEE RIVER									
*Bear Creek	15H1	7800	2/1	55	18.0	9.2	-	-	1
Big Bend	15H4	6700	2/1	36	11.2	3.4	5.2	10.4	8
*Fox Creek	15H2	6800	2/1	24	6.3	4.3	-	-	1
Fry Canyon	15H7	6700	1/31	29	7.8	5.1	4.5	8.5	6
Gold Creek	15H5	6600	2/1	22	6.7	2.3	3.2	6.0	7
*Granite Peak	17H4	7800	2/1	43	15.8	-	-	-	0
Lower Jack Creek	16H1	6800	2/3	14	3.2	-	-	-	0
*Martin Creek	17H3	6700	1/31	33	10.0	-	-	-	0
Rodeo Flat	15H6	6800	1/31	25	7.0	5.0	4.6	8.8	6
*76 Creek	15H3	7100	2/2	45	13.2	5.2	-	-	1
Taylor Canyon	15H9	6200	2/3	24	7.9	-	-	-	0
*Tremewan Ranch	15H8	5700	2/1	13	2.8	1.5	-	-	1
Upper Jack Creek	16H2	7250	2/3	26	7.5	-	-	-	0
UPPER HUMBOLDT									
*Bear Creek	15H1	7800	2/1	55	18.0	9.2	-	-	1
*Big Bend	15H4	6700	2/1	36	11.2	3.4	5.2	10.4	8
*Fox Creek	15H2	6800	2/1	24	6.3	4.3	-	-	1
Fry Canyon	15H7	6700	1/31	29	7.8	5.1	4.5	8.5	6
*Gold Creek	15H5	6600	2/1	22	6.7	2.3	3.2	6.0	7
Lamoille #1	15J4	7100	2/4	37	11.2	5.2	7.0	5.1	11
Lamoille #2	15J5	7200	2/4	30	8.8	4.4	5.5	-	3
Lamoille #3	15J6	7700	2/4	42	12.7	6.1	8.2	-	3
Lamoille #4	15J7	8000	2/4	56	19.6	7.3	11.6	-	3
Lamoille #5	15J8	8700	2/4	85	32.7	11.0	15.1	-	3

*Located on adjacent drainage

NEVADA SNOW SURVEYS FEBRUARY 1, 1956

DRAINAGE BASIN and SNOW COURSE	No.	Elev.	SNOW COVER MEASUREMENTS 1956 Date of Survey	Snow Depth (In.)	Water Content (In.)	Past Record Water Content (In.) 1955	1954	1938-52 Avg.	Prior Yrs. of Record
UPPER HUMBOLDT (Cont.)									
*Lower Jack Creek	16H1	6800	2/3	14	3.2	-	-	-	0
Rodeo Flat	15H6	6800	1/31	25	7.0	5.0	4.6	8.8	6
Susie Creek	15H16	6175	2/3	12	2.2	-	-	-	0
*76 Creek	15H3	7100	2/2	45	13.2	5.2	-	-	1
*Taylor Canyon	15H9	6200	2/3	24	7.9	-	-	-	0
Tremewan Ranch	15H8	5700	2/1	13	2.8	1.5	-	-	1
*Upper Jack Creek	16H2	7250	2/3	26	7.5	-	-	-	0
LOWER HUMBOLDT									
Granite Peak	17H4	7800	2/1	43	15.8	-	-	-	0
Martin Creek	17H3	6700	1/31	33	10.0	-	-	-	0
LOWER COLORADO RIVER									
Mathew Canyon	14M1	6000	1/28	0	0	8.1	0	2.8	7
Pine Canyon	14M2	6200	1/29	0	0	8.4	0	3.3	7
TAHOE									
Daggetts Pass	19L14	7350	1/30	44	11.8	8.1	5.7	9.2	9
Echo Summit	20L5	7500	2/1	135	50.9	25.1	15.8	25.9	14
Marlette Lake	19K4	8000	1/27	88	29.1	16.6	8.5	14.1**	15
Richardsons #2	20L3	6500	1/30	54	16.5	11.7	9.6	17.6	6
Tahoe City	20K16	6250	1/30	36	10.5	7.3	5.5	9.4	21
Ward Creek	20K17	7000	1/31	129	51.6	27.7	20.8	29.8	8
TRUCKEE									
Boca #2	20K14	5900	2/1	34	10.1	6.3	3.2	7.4	8
Sage Hen Creek	20K6	6500	2/1	63	22.1	11.1	8.9	15.0	12
Squaw Valley #1	20K15	7500	1/31	161	66.1	31.1	26.6	-	3
Tahoe City	20K16	6250	1/30	36	10.5	7.3	5.5	9.4**	21
Truckee Ranger Station	20K12	6000	2/1	41	13.4	9.1	6.1	11.9	8
*Ward Creek	20K17	7000	1/31	129	51.6	27.7	20.8	29.8	8
CARSON RIVER									
Carson Pass	19L4	8600	1/29	113	42.5	23.6	12.9	20.9	25
Clear Creek	19K5	7300	1/30	62	18.2	-	-	-	0
WALKER RIVER									
Mt. Grant	18L2	9000	2/3	30	11.0	-	1.4	-	3
Sonora Pass	19L7	8800	2/2	88	35.9	14.6	7.9	-	2
Virginia Lakes	19L13	9500	2/2	82	31.6	11.4	6.9	-	2

* Located on adjacent drainage

** Average is for less than 15-years of record in the 1938-52 period.

VALLEY PRECIPITATION 1/

See map for drainage divisions

DRAINAGE DIVISIONS	Fall Sept-Oct-Nov. 1955 Observed	Fall Sept-Oct-Nov. 1955 Departure 2/	Winter December 1955-January 1956 Observed	Winter December 1955-January 1956 Departure 2/
Snake River	1.28	-0.33	4.07	+1.66
Owyhee River	0.93	-0.25	2.98	+1.17
Upper Humboldt	0.74	-0.43	3.24	+2.02
Lower Humboldt	0.33	-0.42	2.50	+1.47
Northern Great Basin	0.57	-0.36	2.98	+1.78
Eastern Nevada	0.47	-0.50	2.51	+1.51
Central Great Basin	0.37	-0.38	0.94*	+0.16
Lower Colorado River	0.11	-0.41	0.25	-0.49
Walker River	0.35	-0.33	4.84	+3.26
Carson River	0.77	-0.32	8.46	+4.91
Tahoe Truckee	1.25	-1.08	18.00	+12.21

1/ Preliminary data from U. S. Weather Bureau

2/ Departure from 15-year (38-52) drainage division average or available records.

* December only precipitation used.

Agencies Cooperating in Collecting Data Contained in this Bulletin

FEDERAL

- Soil Conservation Service
- Forest Service
- Geological Survey
- Bureau of Reclamation
- Fish and Wildlife Service
- Army
- Navy
- Air Force
- Weather Bureau

STATE

- Nevada State Engineer
- Nevada State Forester-Firewarden
- Nevada Cooperative Snow Surveys
- Colorado River Commission of Nevada
- California Cooperative Snow Surveys
- California Division of Water Resources
- Oregon Cooperative Snow Surveys

PRIVATE

- Walker River Irrigation District
- Amalgamated Sugar Company
- Owyhee Project North Board of Control
- Owyhee Project South Board of Control
- Virginia City Water Company
- Kennecott Copper Corporation
- Squaw Valley Development Company
- Pacific Gas & Electric Company
- Nevada Irrigation District
- Sierra Pacific Power Company
- Washoe County Water Conservation District
- Truckee-Carson Irrigation District
- Pershing County Water Conservation District

Federal - State - Private

COOPERATIVE SNOW SURVEYS

—

Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

"WATER IS THE WEST'S GREATEST RESOURCE"